

# Work Order ID 53183

October 26, 2009 10:24:07 AM



Page 1

Item ID: D4013-3

Accept



Setup Start



Revision ID: A-PRELIM

06.10.26

Stop



Item Name: Stud

Start Date: 26/10/2009 Start Qty: 15.00



PRELIMINARY ISSUE

Required Date: 28/10/2009 Req'd Qty: 15.00

Reference:

09.10.26



Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4013

A-PRELIM

100

0.00



Hardinge

Hardinge CNC Lathe Small

Memo

turn as per Dwg  
Dwg Rev: A-Prelim.

0.00

SA 09/10/27

20

Debur

110

0.00



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

SA 09/10/27

20

120

0.00



QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

ENGINEERING  
APPROVAL

09.10.28

20

[illegible]

Page 2

**Accept**

**Setup Start**

**Stop**

**Cust Item ID:**

**Customer:**

Run Start

**Stop**

**Insp.  
Stamp**

0.00

0.00

0.00

0.00

~~POSITIVE RECALL~~

EFFECTIVE 12-10-80 AUTH LL

RELEASED 1/11/71 DATE 1/11/71

Nov 27

200324ADK

Work Order ID:

53183



*01*  
*m304 R. 375* *Jul 09-10-26*

Item ID:

~~M303~~R0.313

Required Qty.:

1.97368421052632



Unit of Measure:

f

Item Name:

~~303~~ ROUND BAR .313

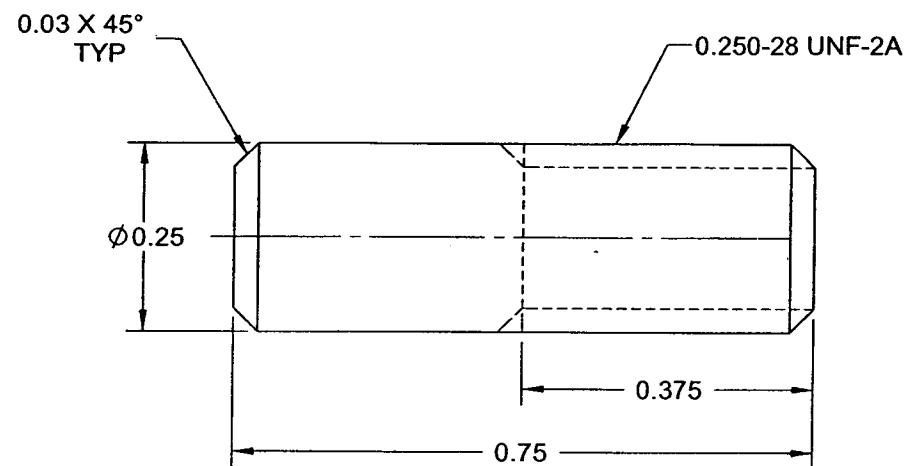
Route Seq. ID:

*304 R. 375*

*M112473*

*SD 09/10/27*





**D4013-3 STUD**

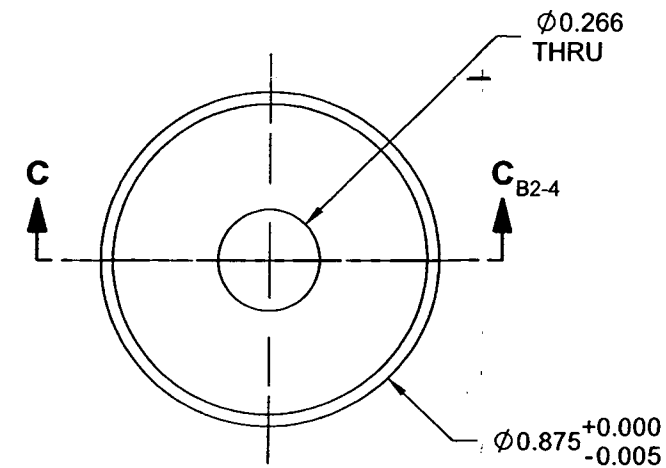
Batch: M112473

x15

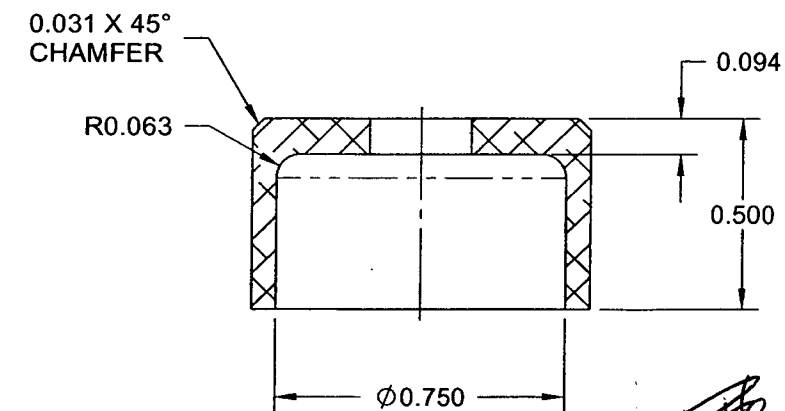
.375 RB 304

0.244

# RD00324 A Oct.



**D4013-5 CUP**



**SECTION C-C D2-4**

Similar  
to D3009

Batch M109508

**PRELIMINARY ISSUE**

09.10.26

Per ECN # 04-6458

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR  
REF. DART SPEC. M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE  
USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT:  
D4013-3 = LESS THAN 0.01 lbs  
D4013-5 = 0.03 lbs

A3007-1

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D4013</b>	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>WEARPLATE ASSEMBLY</b>	NTS
DATE	09.10.22	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

# Receiving Report

Date: 9/8/19  
 Supplier: MAGNA

Batch No: M112473  
 Dart P/O: 10201

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒  
 Shipment Complete: Yes ☐ No ☒ N/A ☒  
 QC6 Inspection ☒ N/A ☒  
 Work Order 016421 N/A ☒

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
<u>M661T6T1000W188</u>		<u>84</u>	<u>0</u>	<u>0</u>	<u>84</u>	
				<u>0</u>	<u>OVER</u>	
<u>M104R-375</u>		<u>48</u>	<u>49.2</u>	<u>1.2</u>	<u>1.00</u>	

Initials of receiver (if shipment OK) Level 12 CL

Production/Admin: 09/08/21  
 Date: 09/08/21  
 Received/Costing: RCP 10201  
 Initial: CS

Location \_\_\_\_\_

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

08/20/09 14:28:01

Merchandise:	60.00
Surcharges:	
No Tax Costs:	
GST	3.00
Total Due:	63.00

tie to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 2% per month compounded monthly.

Q.S.T. # 1213236471  
 G.S.T. # 881565899 RT0001



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO10201**

Purchase Order Date 8/12/09

PO Print Date 8/12/09

Page Number 1 of 1

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

**FAXED**  
8/12/09

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

800 363 6646

Requisition Nbr

Vendor Fax

514 339 1105

Tax Resale Nbr

10127-2607

Terms

Net 30

Vendor Account Nbr

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M304R0.375	304 ROUND BAR 0.375	8/14/09 Yes	48.00	Yours ppd f	\$1.2500	\$60.00
		Special Inst: MATERIAL: AISI 304/316 STAINLESS STEEL ROD NOTE: AISI 303 NOT ACCEPTABLE					
-	M6061T6T1.000W.188	6061T6 RD TUBE 1.00 X .188W	8/20/09 Yes	84.00	Yours ppd f	\$6.2500	\$525.00
		Special Inst: MATERIAL: 6061-T6 OR 6061-T62 TUBING PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8					

PO Total:

\$585.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

CL

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 8/12/09

# Acciaierie Valbruna S.p.A.



## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005) , 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Cient  
VALBRUNA CANADA LTD  
8724 HOLTATE CRESCENT  
L5T 5Z1-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller/Item/Usine producer

Avviso di Spedizione: D-VI09014160  
Lieferanzeige/Packing list/B.L.

Ordine nr: 906002285 Stock - Canada  
Bestell/Your order/Commande

Certificato nr: MEST762530/2009/  
Prüfung/Test/Essai

Conferma ordine nr: EI09003016  
Werk/Our Order/Nr.

Marchio di Fabbrica:  
Zeichen des Lieferanten  
Trade mark  
Sigle de l'usine productrice



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finissage

Tipo di Elaborazione: E+AOD  
Erschmelzungsart/Fining process/Mode d'elaboration

Punzone del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector's stamp/Pointon de l'assesseur

Specifiche:  
Anforderungen / Requirements / Exigences

VSI 0 304/304L A,CF  
AMS-QQ-S-763 B 304 2  
ASME SA193 2007 B8 5  
ASME SA479 2007 S30400/03 A 8  
ASTM A262 2002A PRACTICE E  
ASTM A320 2008 B8 8  
ASTM A479 2008 S30400/03 A

- (0) Chemical analysis only.
- (2) Chemical analysis only.
- (4) SEC.II PT.A 2007 EDITION ADD. 2008a
- (5) SEC.II PT.A 2007 EDITION ADD. 2008a
- (6) SEC.II PT.A 2007 EDITION ADD. 2008a
- (7) Chemical analysis only.
- (9) Chemical analysis only.
- (B) Chemical analysis only.

AMS 5639 H S30400 8  
AMS-QQ-S-763 B 304L 3  
ASME SA276 2007 S30400/03 A,CF 6  
ASTM A182 2008A S30400/03 9  
ASTM A276 2008A S30400/03 A,CF  
ASTM A370 2009  
MIL-S-862 B/1 304/304L

- 1Chemical analysis only.
- 3Chemical analysis only.
- 4Chemical analysis only.
- 5Chemical analysis only.
- 7SEC.II PT.A 2007 EDITION ADD. 2008a
- 8SEC.II PT.A 2007 EDITION ADD. 2008a
- AChemical analysis only.
- CCChemical analysis only.

AMS 5647 H S30403 (1)  
ASME SA182 2007 S30400/03 (4)  
ASME SA320 2007 B8 (7)  
ASTM A193 2008B B8 (A)  
ASTM A314 2008 S30400/03  
ASTM A473 2001 S30400/03 (C)

Qualità: 304/304L  
Werkstoff/Grade/Nuance

Marca: MVAISL MAXIVAL  
Markenbezeichnung/Brand/Nuance

Punzonatura: 304/304L  
Kennzeichnung/Marking/Marquage

Pos. nr. Gegenstand Item nr. Nr. de poste	Oggetto Product description Descrip. du produit	Dimensioni - in Abmessungen Dimension	Tolleranza Toleranz Allowance Tolerance	Lunghezza - in Länge Length Longueur	Colata Schmelze Heat Coutée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losn. Lot nr. Lot nr.
0010	Round	0,3750	484-06B	144 / 148	423098		2.205	902400070

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind k. Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été trouvé conforme aux exigences

Controllo antimescolanza: OK  
Verwechslungsprüfung: spezialanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Besichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks: satisfactory  
Contrôle visuel et dimensions: satisfaisant

### TEST ALLO STATO DI FORNITURA

Test on delivery condition Prüfung auf lieferbareitem produkt test à l'état de fourniture Prueba sobre el material así como entregado

TEST A FOLIA DE FORMARE												Prüfung der Formbarkeit				Prüfung der Materialziele				Prüfung der Materialziele			
TEST	Provetta/Proccab Specimen/Eprouvette Läng. Diam. Spess. Größe Diam. Dicke Wegh. Diam. Thickness Long. diam. épais mm	°F	Posiz. Saggio Position Lieu Emplacement 1)	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Bruchdehnung Reduction of area Striction RA %	Resilienza Kerbschlagarbeit Impact Value Resilience	Durezza Härte Hardness Dureté HB													
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max		45	-	90	-	30	-	40	-												
A	8,75	68	L	89		110		35		67									259				

TEST	Descrizione	MIN	MAX	Valore
A	Grain size for ASTM E112			6

Mechanical properties according to ASTM A370.

1) L=longitudinale/längs, T=transversale/quer, Q=Tangenziale/tangential

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

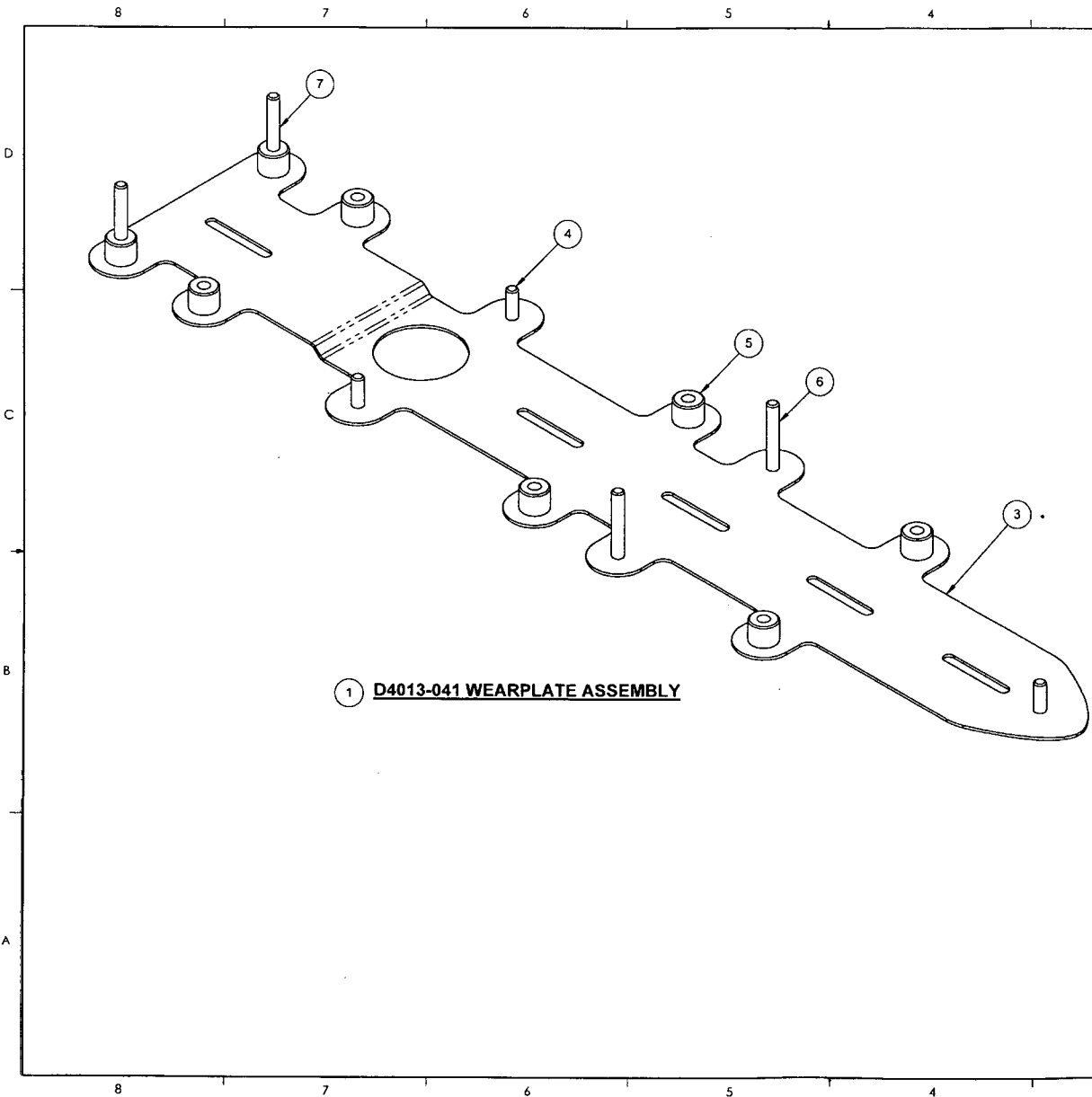
Colata /Heat Schmelze/Coulée	min - max 0,030	1,00	2,00	18,00 20,00	1,00	1,00	8,00 10,50	-	-	0,040	0,020 0,030	0,100	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %					
423098	0,018	0,55	1,90	18,13	0,51	0,60	8,19	0,075	0,025	0,030	0,094					

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Vicenza, 25/06/09 VCO098 (Mod. MCER)	Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 2
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1 D4013-041 WEARPLATE ASSEMBLY

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4013-041	WEARPLATE ASSEMBLY
3	1	D4013-1	WEARPLATE
4	3	D4013-3	STUD
5	6	D4013-5	CUP
6	2	D4013-9	STUD
7	2	D4013-11	STUD
21	A/R	2059B	HARDCOAT

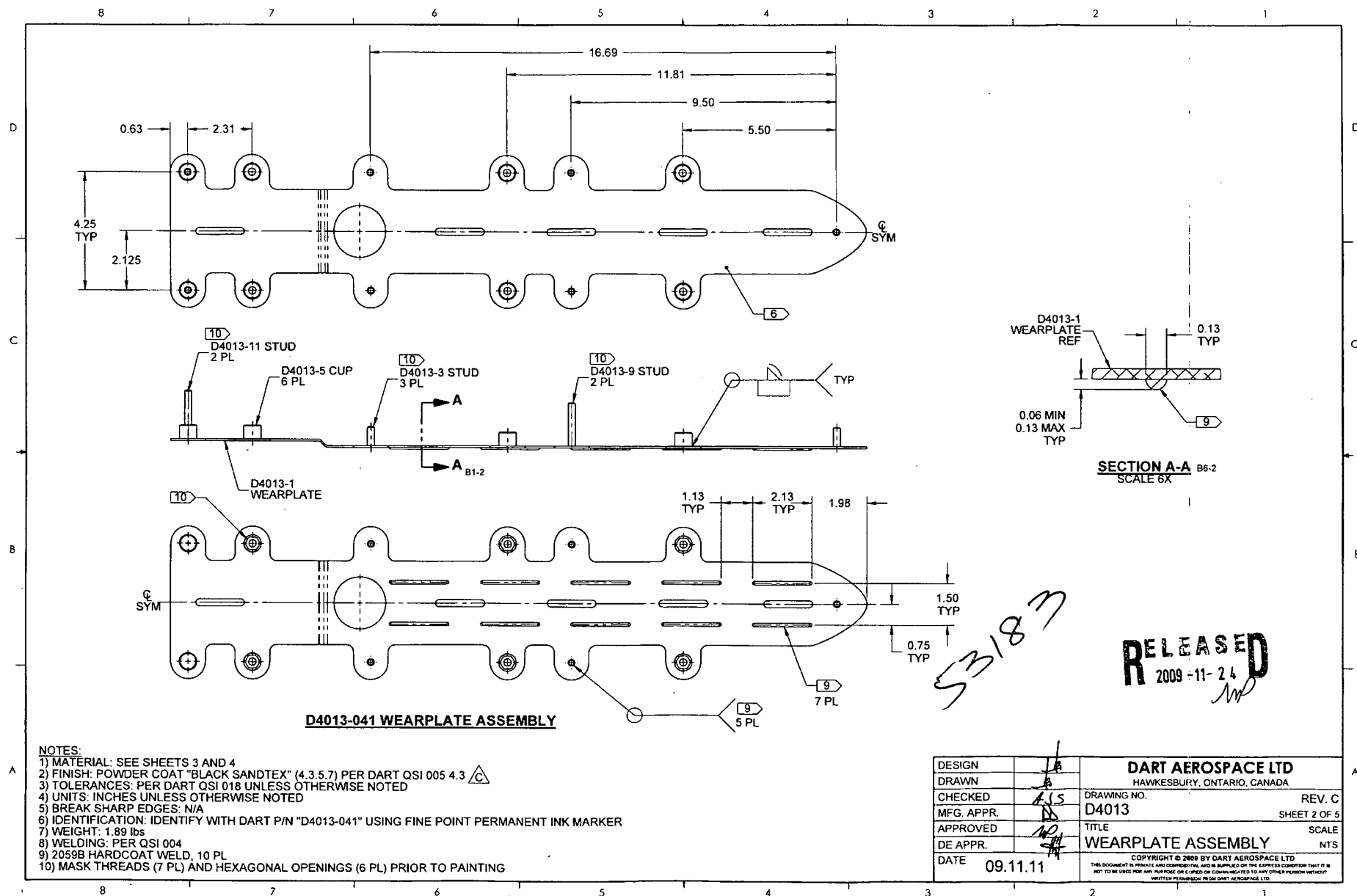
53183

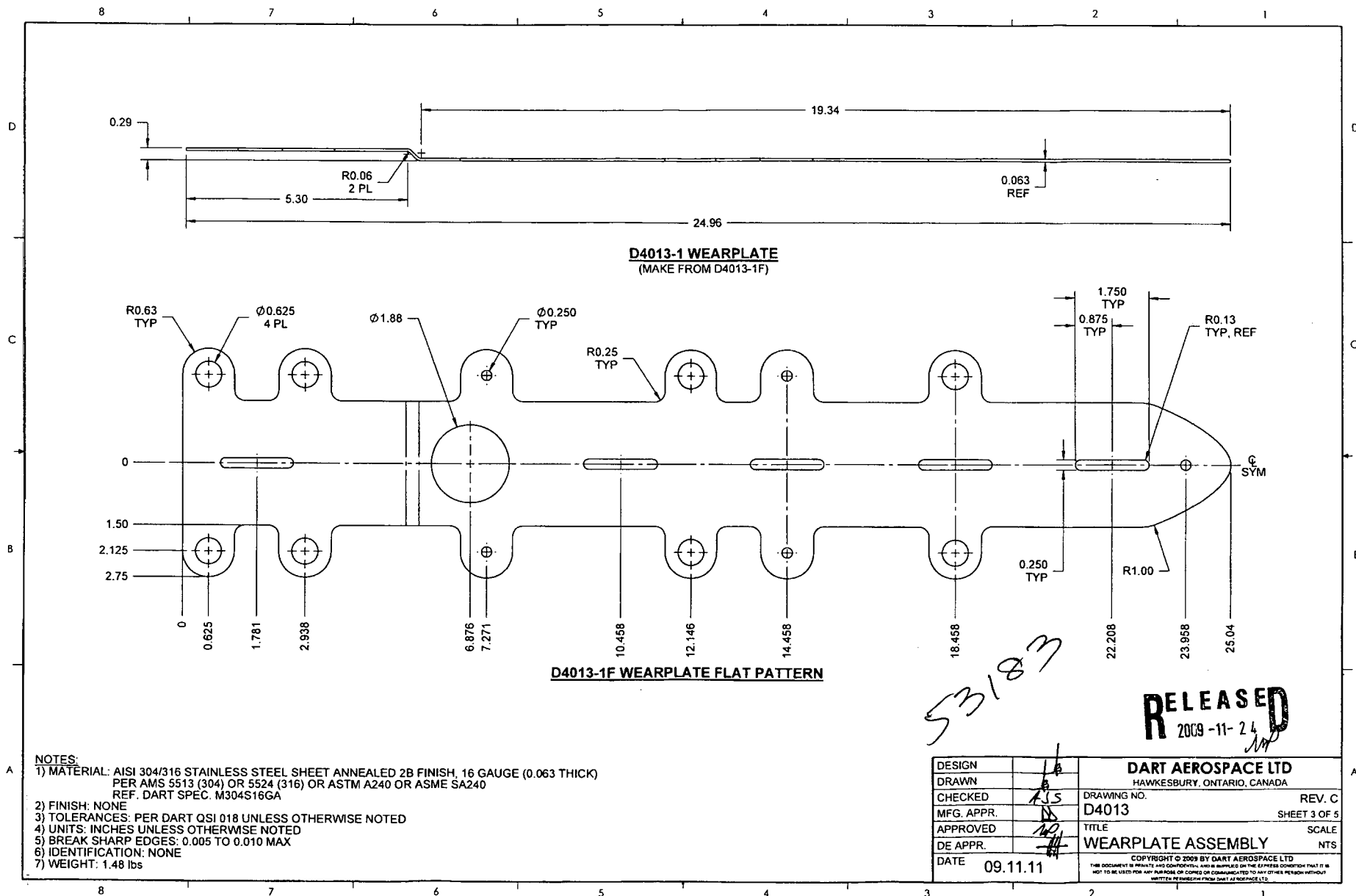
**RELEASED**  
2009-11-24  
MP

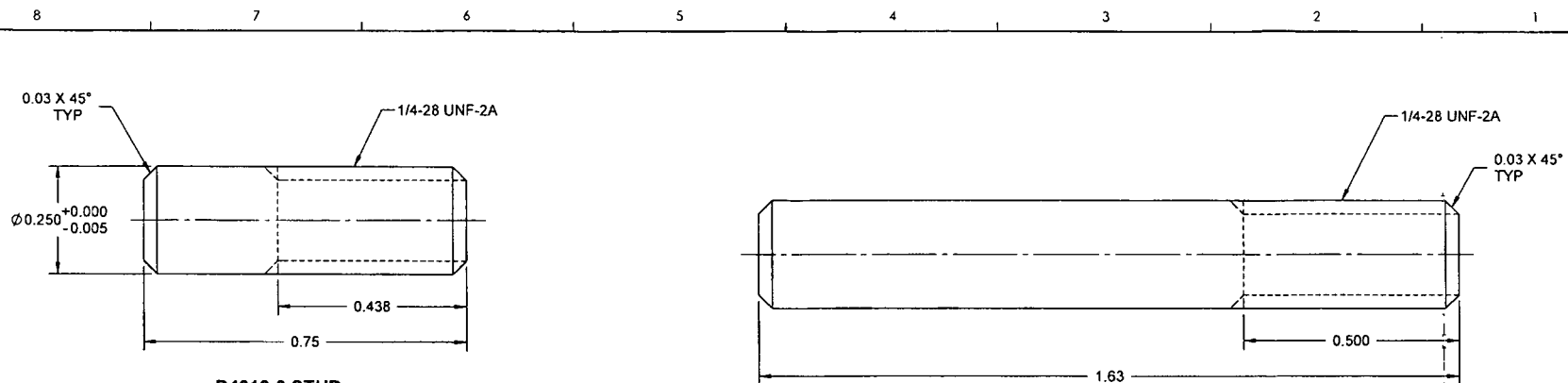
C	SIMPLIFY DESIGN FOR MANUFACTURING PURPOSES; REDESIGNED ITEM 5, ELIMINATED D4013-7 CUP (NO LONGER USED); CHANGED FINISH FROM GREY TO BLACK SANDTEX	MB	09.11.11
B	REDESIGN	MB	09.11.02
A	NEW ISSUE	MB	09.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.11.11		

<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. <b>D4013</b>	REV. C
TITLE <b>WEARPLATE ASSEMBLY</b>	SCALE NTS
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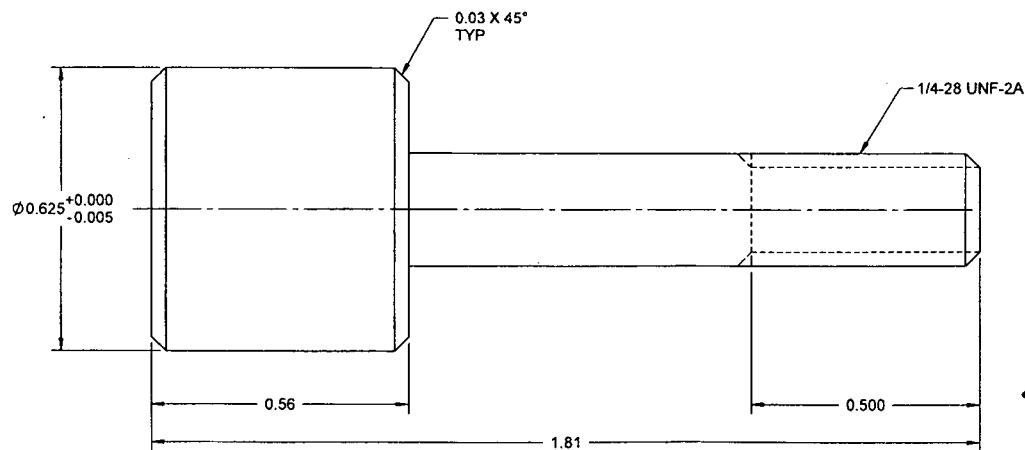






**D4013-3 STUD**

**D4013-9 STUD**



**D4013-11 STUD**

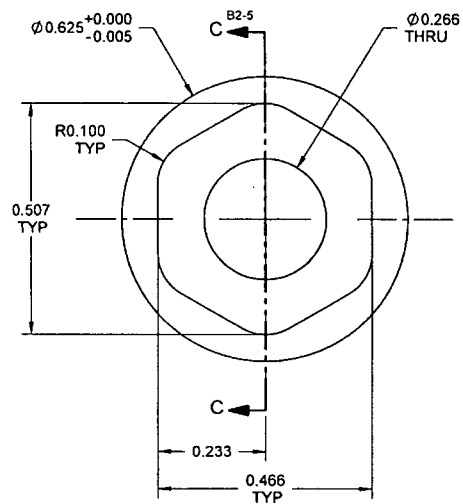
**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR  
REF. DART SPEC. M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: LESS THAN 0.01 lbs EACH

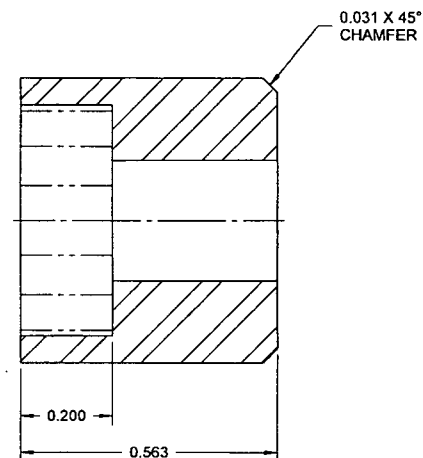
DESIGN	4	DART AEROSPACE LTD	
DRAWN	JS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	JS	DRAWING NO.	REV. C
MFG. APPR.	JS	D4013	SHEET 4 OF 5
APPROVED	JS	TITLE	SCALE
DE APPR.	JS	WEARPLATE ASSEMBLY	NTS
DATE	09.11.11	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

**RELEASED**  
2009-11-24

53183



**D4013-5 CUP**



**SECTION C-C D6-5**

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR PER ASTM A276  
REF. DART SPEC. M304R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs EACH

DESIGN	1	<b>DART AEROSPACE LTD</b>	
DRAWN	1	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ALS	DRAWING NO.	REV. C
MFG. APPR.	DS	<b>D4013</b>	SHEET 5 OF 5
APPROVED	MD	TITLE	SCALE
DE APPR.	SH	<b>WEARPLATE ASSEMBLY</b>	NTS
DATE	09.11.11	<small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

**RELEASED**  
2009-11-24  
MD

53183